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SERVICES FOR
CRIPPLED CHILDREN
IN MARYLAND

1936-1948



Charles H. Halliday, M. D.

Director

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1937 - 1948

Maryland State Department of Health

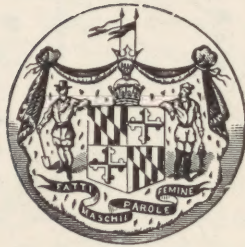
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Baltimore 18, Maryland



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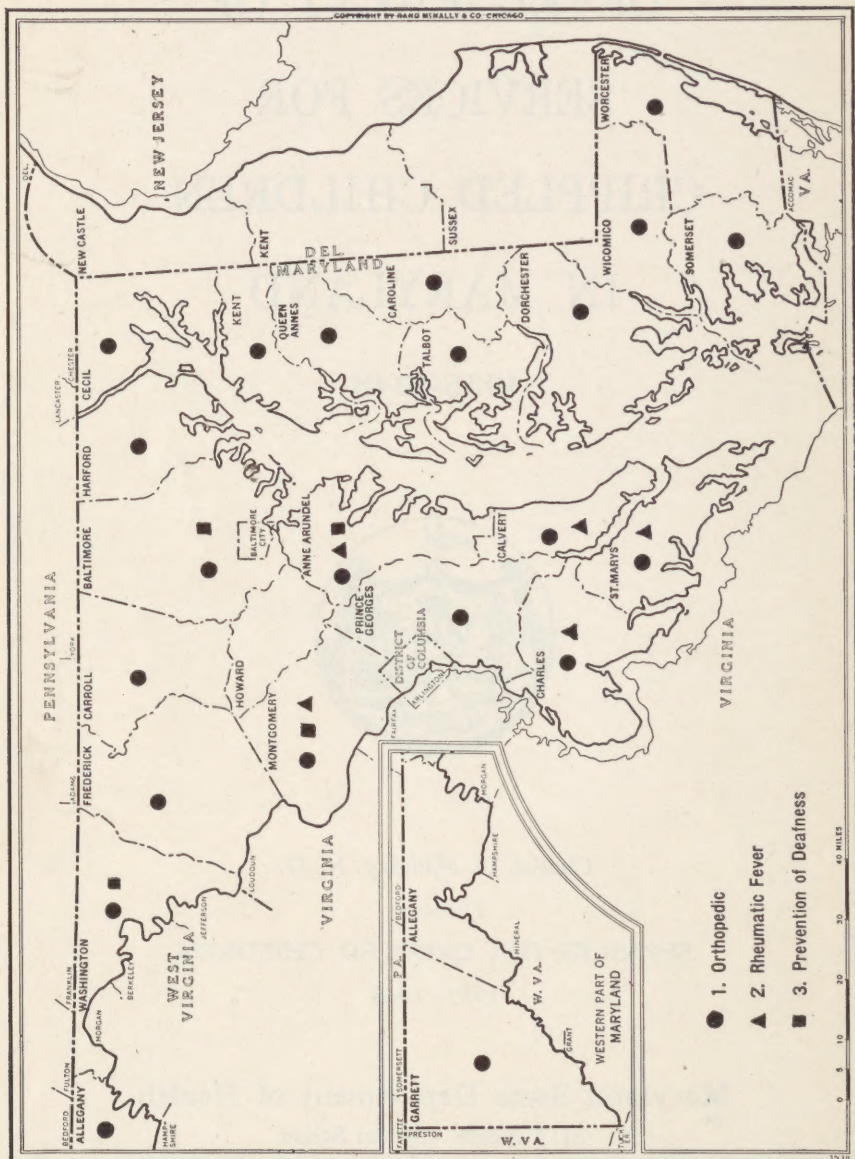
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Location of Clinics - Services For Crippled Children

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HISTORICAL BACKGROUND

For the past twelve years Services for Crippled Children has been the official agency for the administration of a comprehensive program for the treatment, care and rehabilitation of crippled children throughout the State. Prior to that time such activities were conducted through individual organizations and private agencies. Many of these are now working in close cooperation with the official agency and rendering valuable assistance in carrying out the State program.

Until 1895, crippled children requiring medical or surgical care were treated in the dispensaries or orthopedic wards of the general hospitals, and the pioneer institution devoted exclusively to the care and treatment of crippled children in Maryland was the Hospital for the Relief of Crippled and Deformed Children founded in that year by Dr. R. Tunstall Taylor and Mr. Robertson Taylor. Originally housed in a private residence and supported by voluntary contributions and a group of women known as the Women's Orthopedic Guild, the work expanded rapidly and in 1911 through the generosity of Mr. James Lawrence Kernan the hospital known at present as the James Lawrence Kernan Hospital and Industrial School of Maryland for Crippled Children came into being. It is on Windsor Mill Road, Baltimore, and thanks to the initial endowment fund established by Mr. Kernan and the gifts of subsequent benefactors it has grown to an institution with a capacity of 85 beds, facilities for physical and occupational therapy and the latest in operating equipment. The most modern methods of treatment are utilized and the professional staff is of the highest standing. The patients receive vocational and educational training as well as medical and surgical care.

Ten years later, in 1905, the first Convalescent Home in the State for Crippled Children was opened in a farm house loaned to Dr. William S. Baer by Mr. Bernard Baker of Catonsville. It was operated by a volunteer staff of physicians and nurses, and the necessary funds were provided by a Women's Auxiliary.

Within a few years, the Home, at first run only during the summer months, had developed into an all year round institution combining the functions of a hospital with educational and vocational training. Its name was changed to The Children's Hospital School, and funds were raised for the purchase of a tract of land on Green Spring Avenue at 41st Street, Baltimore, where the first of the present buildings was erected in 1911 by Mrs. William Painter as a memorial to her husband.

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Additions to the original building were made from time to time, culminating in the erection in 1932 of the Bowles Memorial, a work shop combining facilities for medical and surgical treatment, recreation and education with laboratory equipment for study and research. The Children's Hospital School has a capacity of 125 beds. Its Physical Therapy Department is the finest in existence and it has done extraordinarily full and accurate work in the study of poliomyelitis, arthritis, the education of muscles and muscle testing technique.

Through a grant in aid from the National Foundation for Infantile Paralysis it maintains a Respirator Unit for the treatment of polio patients, the first of its kind in the United States. It also has a Brace Shop which supplies braces for crippled children throughout the State.

Until 1900 there were no organized services for crippled children in Maryland. In that year the Baltimore Council of Jewish Women formed a committee, known as the Guild for Crippled Children, which undertook to locate crippled children in the City of Baltimore, to provide transportation for them to and from the schools, special attention for handicapped pupils, treatment and hospitalization for children in need of such care, and to obtain the support and interest of the public in such work. In 1947 it withdrew voluntarily to give way to a State-wide organization, the Maryland League for Crippled Children, founded in 1927.

The Maryland League for Crippled Children is a member of the National Society for Crippled Children. Its objectives when organized were to locate all crippled children throughout the State, to undertake their physical rehabilitation, to provide for their education through special classes in the public schools, to provide them with vocational training and to place them in remunerative work. Until the establishment of the League only occasional orthopedic clinics were held in a few Maryland counties, the first having been opened in 1924, but in 1927 the League took over a clinic in Hagerstown and began to extend its services to other parts of the State. Between 1927 and 1936 when the official agency inaugurated its State-wide program the Maryland League held 189 county clinics at which 2,731 patients were examined and received treatment.

The League was responsible for a bill passed by the Maryland Legislature in 1930, providing for a biennial survey of school children for the purpose of locating all handicapped children in the State between the ages of 5 and 18, and the Maryland State Health Department assumed the responsibility for their care. This survey comple-

mented the regular biennial school census which had been taken since 1924, and included specific information concerning handicapped children residing in Baltimore or the several counties.

The activities of the Maryland League at the present time are largely confined to children in Baltimore City and to individuals in the counties over 21 years of age. It provides physical therapy in the homes of patients, assists orthopedic surgeons at and provides transportation to and from the City clinics. It also has two social service workers who assist in determining the eligibility of patients for admission to the State Register, and there is reciprocal notification between the League and the official State agency with respect to children in need of care. The League maintains a summer home for handicapped children at Camp Greentop, at Catoctin, Maryland, and it cooperates with the official agency in special work for cerebral palsy patients.

The Allegany County League for Crippled Children, formed in 1934, employs a social worker who investigates new patients, assists in follow-up work, makes recommendations for the relief of indigent patients and provides transportation from rural sections to the county clinics. The League for the Physically Handicapped in Prince George's County has for some years conducted a similar program.

The need for convalescent care of crippled children in Maryland has never been adequately met. The first move to provide such facilities was made by the establishment of the Ingleside Convalescent Home in 1905, which as we have seen later developed into the Children's Hospital School. At the present time there are three such institutions in the State.

St. Gabriel's Convalescent Home at Orange Grove, Maryland, has been conducted since 1918 by the sisters of the Protestant Episcopal Church. The capacity of the Home is 24 beds. Although children recovering from various diseases are received at St. Gabriel's, the great majority are of the rheumatic fever — cardiac group. The patients receive occupational therapy, schooling provided by the State Board of Education, dental care and nutritional service. The medical care is under the direction of the Cardiac Clinic of the Harriet Lane Home at Johns Hopkins Hospital.

Happy Hills Convalescent Home for Children at Mt. Washington was founded in 1922 by Miss Hortense M. Wingert, with the cooperation and assistance of the late Dr. William H. Welch and Mr. Edward Norris. It was moved to its present location in 1930, and now has a

capacity of 80 beds. All types of cases in which expert convalescent care is needed are accepted at Happy Hills, and particular attention is paid to children presenting behavior problems and cases of arrested development.

Christ Child Farm for Convalescent Children at Rockville, Maryland, maintained by the Christ Child Society of Washington, D.C., cares for children from the District of Columbia and adjacent sections of Maryland.

COOPERATING AGENCIES

There are also numerous societies and agencies which cooperate in various ways with Services for Crippled Children. Among them are —

The American Legion, Department of Maryland

The American Red Cross, Maryland Chapter

The Baltimore League for the Hard of Hearing

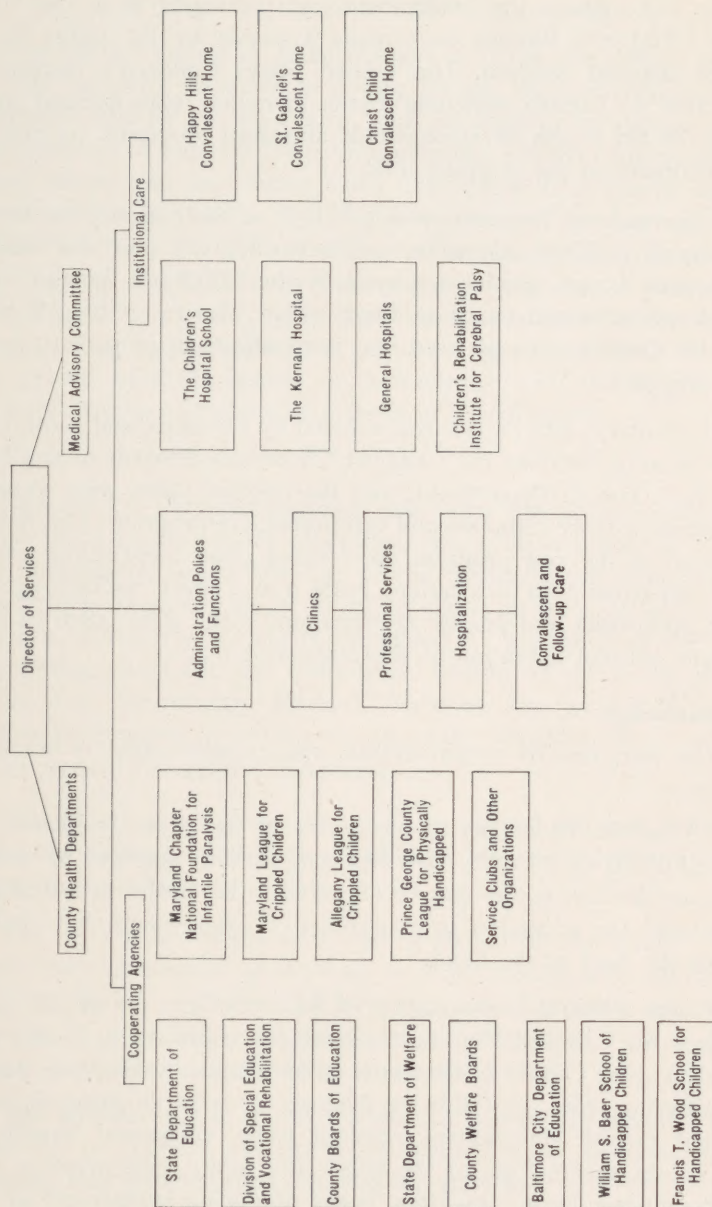
The Maryland Association for Cerebral Palsy

The Maryland Rheumatic Fever Association

The National Foundation for Infantile Paralysis

The Associated Jewish Charities, Catholic Charities, the Baltimore Council of Social Agencies, service clubs, fraternal orders, and other organizations. It also should be mentioned that the Shriners Hospital in Philadelphia, Pennsylvania, receives Maryland children under twelve years of age for treatment of orthopedic conditions requiring long hospitalization.

MARYLAND STATE DEPARTMENT OF HEALTH SERVICES FOR CRIPPLED CHILDREN



ESTABLISHMENT OF SERVICES FOR CRIPPLED CHILDREN

. In 1936, under the Social Security Act funds from the United States Children's Bureau were made available to the States for the care of crippled children. The United States Children's Bureau was authorized to furnish matching funds to money appropriated by the States for aid in the development of approved programs for the care and treatment of the crippled child.

This rendered the creation of a Maryland State agency for services to crippled children advisable, and accordingly a plan for such an agency was drawn up and approved by the Children's Bureau, which immediately allocated matching funds to the Maryland State Board of Aid and Charities, to be used for hospitalization of patients on the State Register.

In January, 1937, a law was enacted by the Maryland State Legislature making Services for Crippled Children a division of the Maryland State Health Department, and the original plans were expanded to embrace a more complete and comprehensive program. The effective execution of the new program necessitated close cooperation with the State Department of Education, State and County welfare agencies, health authorities and private agencies, and steps were taken to insure the most efficient operation of this state-wide plan.

Administration.

For purposes of administration the crippled child is defined as follows —

"A person under twenty-one years of age who, by reason of a physical defect or infirmity, whether congenital or acquired by accident, injury or disease, is, or may be expected to be totally or partially incapacitated for education or remunerative employment, but shall not include the deaf or the blind."

Under a liberal interpretation of this definition, the official agency, Services for Crippled Children, accepts for treatment at clinics maintained in every County in the State, patients under twenty-one years of age suffering from the following diseases — infantile paralysis, scoliosis, and rachitic deformities, cerebral palsy, congenital harelip, and cleft palate, tuberculosis of the bones and joints, osteomyelitis, crippling conditions due to fractures, burns producing impairment of function, crippling conditions due to rheumatic fever and other physical handicaps. Children having congenital defects of the ear, especially

those which may interfere with normal hearing, speech defects which may impair their normal progress, impairment of vision which may retard normal development are also eligible for treatment.

The administration of these services is under the official agency. The only authority delegated to county Health Departments is the administrative control of the clinics, such as making arrangements for the attendance of patients, providing quarters for the clinics, and furnishing nurses and secretaries when clinics are held. Funds are not allocated to the local units, and all bills contracted by the local staffs are forwarded to the central office for approval and payment. The official agency maintains individual contacts with county medical and dental societies, public health organizations, official State welfare groups, professional groups and volunteer agencies. Members of all these groups have the benefit of consultation with the specialists at the County clinics and access to records in special cases.

Personnel.

Services for Crippled Children are under the administrative control of the Director of the Maryland State Department of Health. Next in authority is the Director of the Services, who supervises all the activities comprised in the operative plan. He may, at will, call on a Medical Advisory Committee composed of members of the Baltimore Orthopedic Club, the Orthopedic section of the State Medical Society and the county Medical Societies for assistance in the selection of qualified specialists or for advice when problems concerning the care of the crippled child arise.

The full time employees of the State agency are two orthopedic nurses, two medical social work consultants, six physical therapists and three clerical workers.

The orthopedic nurses assist the personnel of the county Health Departments in matters pertaining to case finding and registration, diagnostic clinics, treatment and follow-up care. They take part in the operation of the Clinics, study and review case records, and arrange for appointments and transportation when indicated.

The medical social work consultants advise the county health authorities in matters pertaining to medical-social case work. Occasionally they provide direct case work service.

The physical therapists give treatments at centers located in County Health Departments or in the patients' homes, issue instructions to



A County Clinic

patients or their parents with regard to home care, and serve as consultants to public health nurses in problems related to physical therapy.

The orthopedic surgeons and specialists of the official agency are employed on a part time or clinic fee basis, plus their traveling expenses to the county clinics. Their service includes pre-operative care, post-operative treatment, and all other medical and surgical attention necessary for the restoration of the crippled child to a condition as nearly normal as possible.

Locating Crippled Children.

Crippled children in need of care and treatment are located through the periodical school census, reports from physicians, child health conferences, summer roundups, hospital clinics, nursery schools, and welfare, nursing, vocational rehabilitation and other agencies. Information regarding cases of poliomyelitis and rheumatic fever, which must be reported to the Bureau of Communicable Diseases, are referred to the State agency by that bureau.

Physicians in Maryland are not required by law to report congenital defects and birth injuries on certificates recording live births. Such information is obtained from private physicians, public health nurses, clinics, and from parents and school authorities.

All cases reported to Services for Crippled Children are entered on the official register and a complete investigation is made of the patient and the home by one of the public health nurses. If the condition requires medical or surgical care, the patient is referred to the first clinic held in his locality. If it is urgent, demanding emergency treatment, the patient is sent to Baltimore for examination by a specialist.

Policy.

The policy of the official State agency follows very closely the recommendations made by the Children's Bureau Advisory Committee. It provides complete clinical appraisal, indicated medical or surgical treatment, mechanical aids and appliances, nutritional, psychological and vocational analyses, and all other services required for the rehabilitation of the crippled child. These facilities are available to every crippled child throughout the State. There are no racial distinctions and ability to pay is not a factor in the determination of eligibility for treatment.

Clinical Services.

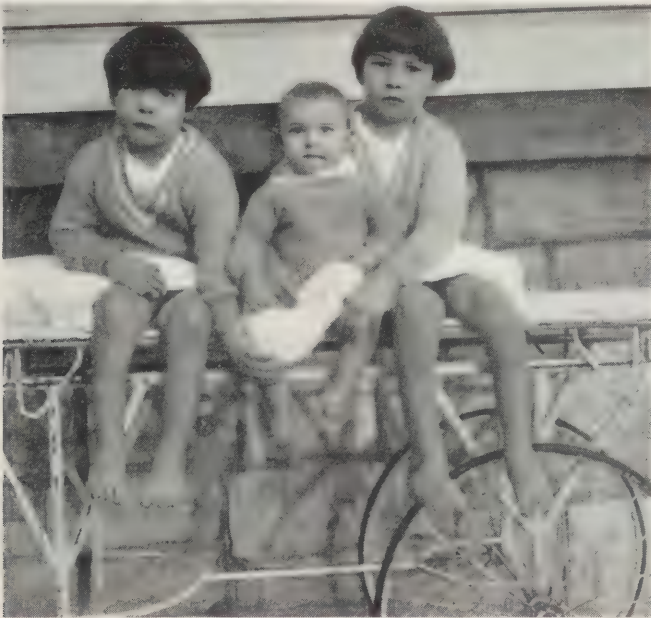
The need for clinics in the various counties is determined by means of surveys made in cooperation with the local health authorities, in order to determine the number and types of cases requiring clinical treatment in any given area.



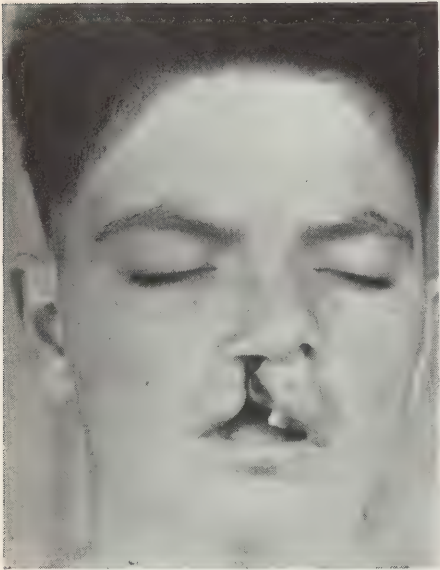
Medical Examination by Clinicians

All patients coming within the definition of the crippled child as established by the official agency are eligible for clinical examination. Eligibility for treatment is determined by the clinician and his staff. Patients admitted to the clinics after examination return at regular intervals for check-ups and treatment. Physical therapy, when required, is administered in conformity with instructions from the orthopedic surgeons at the clinics. Braces, crutches, and various corrective appliances are supplied to those who need them without charge.

The discharge of patients from the clinics depends on the degree of recovery and whether or not additional improvement may be expected. Recommendations for discharge are made by the orthopedic surgeons or specialists in attendance at the clinics.



*Three cases of congenital club foot in one family
Before and after treatment*



Cleft Palate Correction



*Adhesion of calf to upper leg result of burn
Patient walks after series of operations*

OTHER SERVICES

Hospitalization.

Hospitalization is recommended when this procedure offers the best possible chance of recovery, and the selection of children for hospital treatment is made by the clinician, the family physician or the public health nurse. Arrangements for hospitalization are made at the hospitals selected by the official agency. As a rule, no definite period of hospitalization is fixed, and the patient is discharged at the earliest date consistent with the best medical or surgical care.



Correction of Bow Legs

Home Care.

When a child is discharged from the hospital or the clinic the official agency makes arrangements when necessary to return him to his own home, and copies of the records in the case are sent to the County Health Department, together with recommendations for home care which are carried out under the supervision of the County Health Nurse. The county welfare agencies are brought into the picture if there is a need for public assistance other than that afforded by the official agency. Children who can be transported are periodically taken for checkups at the local clinics, and the official agency assumes the care of the child during any intercurrent illness.

Convalescent Institutional Care.

Services for Crippled Children provides for the care of convalescent patients in one of the three licensed convalescent homes when this type of care is indicated. The number of patients referred to such institutions is extremely small as the available facilities are limited, and the average stay of the patients is three months, occasionally longer.

Foster Homes for Convalescent Children.

In cases where home care of convalescents is impractical or inadvisable the official Agency avails itself of the foster homes approved by the State Department of Welfare, the county health authorities and recognized volunteer agencies. Many of the foster homes on the agency's roster are for negro children, as there are no convalescent homes for negroes in the State of Maryland. The length of the patient's stay in the foster home is determined by his medical history, the progress he has made towards rehabilitation and the recommendations of the clinician in charge of the case.

Follow-Up Care.

The official agency frequently reviews the status of each child on the State Register. The formulations of future plans for the care of the patient are made at regular intervals by the attending clinician, the orthopedic nurse and the physical therapist in consultation with the county health authorities. This surveillance by the agency continues until the patient is restored to a condition as nearly normal as possible.

EXPANSION OF SERVICES

When the Maryland State Department of Health took over Services for Crippled Children in April, 1937, the program of the official agency was limited almost exclusively to the treatment of orthopedic conditions. It soon became evident, however, that the establishment of additional clinics for crippling diseases, other than those coming under the category of orthopedic conditions was imperative. Accordingly, the Services for Crippled Children began to plan programs for special clinics to meet this need. The first of these was the Rheumatic-Fever - Cardiac Program.

RHEUMATIC FEVER — CARDIAC PROGRAM

Rheumatic fever is one of the most critical problems with which public health officials have to deal. It is the cause of more deaths in children between the ages of 10 to 14, inclusive, than any other disease, and it has been estimated that 90% of the cases of heart ailments among children are due to this disease. Its diagnosis is extremely difficult and no specific test for its early discovery has yet been found. In addition to cardiac affections induced by rheumatic fever, there are many cases of congenital heart disease in children which may be cured by proper surgical intervention. These considerations prompted the drafting of a Rheumatic Fever-Cardiac Program by the official agency which was reviewed and approved by the United States Children's Bureau. The first clinic under the program, financed by a special grant in aid from the Federal Government, was opened in Anne Arundel County in October, 1940. In 1947, a similar clinic was established in Montgomery County and in 1948, with the assistance of the Children's Bureau, a Rheumatic Fever - Cardiac clinic was set up at La Plata, Maryland, to serve Charles, St. Mary's and Calvert Counties. In addition to the clinics conducted by the official agency, several of the counties have clinics supported financially by local organizations.

The administrative procedure followed in the Rheumatic Fever-Cardiac Clinics is the same as that observed in all the clinics operating under the official agency.

The personnel consists of a county staff headed by the County Health Officer, and a consultative and advisory staff under the Director of Services for Crippled Children. The official agency provides a part time cardiac consultant, a cardiologist and a pediatrician who conduct the clinics on a clinic fee basis.



A Cardiac Examination

All children admitted to the Rheumatic Fever - Cardiac Clinics are placed on the State register. Their location is facilitated by the fact that since 1943, rheumatic fever has been a reportable disease in Maryland. They are also located through the cooperation of private physicians, the periodical examination of school children, and through the other clinics in the various counties.

Any individual under twenty-one years of age suffering from rheumatic fever, heart disease, or from conditions leading to heart disease who may reasonably be expected to benefit by medical or surgical treatment, hospitalization, convalescent care and follow-up care may

receive service under the program. Primary consideration is given to children suffering from the first attack of rheumatic fever.

The clinical services include complete physical examinations, laboratory tests, the compilation of case and family histories and the patient is given continuous care when indicated, until he reaches the age of 21. Rheumatic fever patients whose condition may be complicated by some other acute infection are, when necessary, treated in their own homes by a competent physician. Cases requiring hospitalization are admitted to local hospitals or one of the hospitals located in Baltimore City.

In cases where the diagnosis is difficult or complicated the clinician may avail himself of the services of the Cardiac Consultant, the head of the Cardiac Clinic at the Harriet Lane Home, Johns Hopkins Hospital. Cases involving congenital malformations of the heart, which are fairly common and of many varieties, and the condition known as the tetralogy of Fallot, requiring what is known as the "blue baby" operation, are sent to the Harriet Lane Home for medical and surgical treatment. A special grant in aid from fund B of the Children's Bureau is allocated to Services for Crippled Children to provide hospitalization for patients from other states who arrive in Baltimore for emergency treatment of congenital heart conditions and are without sufficient funds to pay for such treatment. Whenever advances are made for this purpose a request for reimbursement is sent to the official agency of the patient's home state.

Recently an agreement has been reached between the Maryland State Department of Health and Johns Hopkins University for the development of a graduate training program in rheumatic fever and congenital heart disease. Under this agreement the Maryland State Department of Health will transfer annually to the Johns Hopkins University funds for the maintenance of two Senior Fellowships and one Junior Fellowship for qualified physicians who expect to enter the fields of teaching or public health. This agreement will eventually make additional personnel available for the extension of Rheumatic Fever - Cardiac Clinics throughout the State.

PREVENTION OF DEAFNESS PROGRAM

The Prevention of Deafness program under Services for Crippled Children was inaugurated in Washington County in 1943. Prior to this time the Maryland State Department of Health had been cooperating

with school authorities and the American Legion in conducting Hard of Hearing clinics, but the necessity for a wider program was shown by the large percentage of school children with defective hearing caused by otitis infections, nasal disease, with middle ear damage, and other remediable conditions.

Plans for the execution of this program were drawn up by the Otolaryngologic Staff of Johns Hopkins Hospital, and an advisory committee composed of representatives of the State and County Departments of Health and Education, the county medical associations and other interested persons and agencies.

These plans were submitted to the United States Children's Bureau which made a special grant in aid to the State Department of Health for the establishment of a model clinic in Washington County as part of Services for Crippled Children.

The outstanding success of the Washington County clinic at Hagerstown led to the establishment of similar clinics at Annapolis, Anne Arundel County, in 1946, and at Rockville in Montgomery County in 1947. Recently financial aid has been obtained from the United States Children's Bureau for a Prevention of Deafness clinic in Baltimore County, which will be in operation early in 1949. The Children's Bureau will also, through the official agency, finance a project for the training of physicians in methods for the prevention of deafness at the Department of Otolaryngology, Johns Hopkins Hospital, Baltimore.

In addition to the clinics operated by the official agency, several of the Maryland counties conduct clinics financed by local organizations.

The Prevention of Deafness clinics are conducted by a clinician appointed by the official agency, assisted by a county public health nurse, a medical social consultant and a technician. The clinician serves on a clinic fee basis and is an ear, nose and throat specialist thoroughly experienced in modern techniques for the prevention of deafness, and the all-day clinics are held bi-monthly or weekly, according to the current case load.

Patients are referred to the clinics through public health nurses, medical social workers, teachers and physicians, and through screening tests in schools. For screening, the official agency employs a technician specially trained for this work at the Otological Laboratory of Johns Hopkins Hospital.

The services at the clinic include a thorough examination, diagnosis and medical treatment and the use of radon therapy. Patients,

when necessary, are provided with hearing aids and instructed in their use. Children with acute aural infections are considered most urgent among those in need of expert care and treatment. Next come those with histories indicative of impairment of hearing and those suffering from speech difficulties or presenting unexplained behavior problems which are often due to this cause. Children recommended by the clinician for hospital care are admitted to approved local hospitals for medical or surgical treatment, and, in certain cases, are sent to Baltimore hospitals.

If during the examination of the patient any other condition requiring attention is discovered, the patient is referred to the specialist or to one of the other clinics conducted by the official agency.

Follow up work by public health nurses and school authorities is an important part of the program, and the education of parents as to the necessity of proper medical care for children with "earaches" and defective hearing is conducted through various channels such as P.T.A. meetings, distribution of pamphlets and visiting nurses with the cooperation of non-official agencies and organizations.

SPEECH REHABILITATION PROGRAM

A Speech Rehabilitation Program, at the outset confined chiefly to children with plastic, orthopedic or dental conditions causing speech difficulties such as stuttering, articulatory disorders and cleft palate speech has recently been inaugurated by Services for Crippled Children. These include cleft palate, hare lip, spastic affections and malocclusion of the jaws. Just as surgical correction of many orthopedic conditions does not produce optimum results without physical therapy so it has been found that plastic surgery in such cases does not result in improvement of speech without corrective measures. It is also true that many spastic patients suffer from a loss of hearing which affects their speech. These cases require special training for speech rehabilitation.

With these facts in mind the official agency established a Speech Clinic in Anne Arundel County in July, 1946, as a supplement to its Prevention of Deafness program. Four speech clinics are held in Annapolis each month by a trained and qualified speech clinician employed on a clinic fee basis, assisted by a public health nurse. Patients are referred to the Speech Clinic by the Prevention of Deafness Clinic, school authorities, regular Health Department clinics, private physicians, public health nurses and welfare workers.



Speech Correction

The examinations at the Speech Clinic are physical and psychological. When physical abnormalities are in evidence, the patient is referred to the proper specialist, and every child is given a psychometric test. Each patient accepted at the clinic is treated individually. Sometimes the speech difficulty involves personality problems, and in others ear training is necessary to enable the patient to differentiate between the wrong and right sound. When the correct diagnosis has been made the clinician interviews the parent with whom he discusses the findings of the examination, the nature of the treatment and the importance of home cooperation. A trained teacher, appointed by the State Department of Education, treats, under the supervision of the clinician, cases assigned to her after diagnosis.

In Montgomery County the Board of Education furnishes a qualified teacher in speech correction for children recommended for this service by the Prevention of Deafness Clinic in that county.

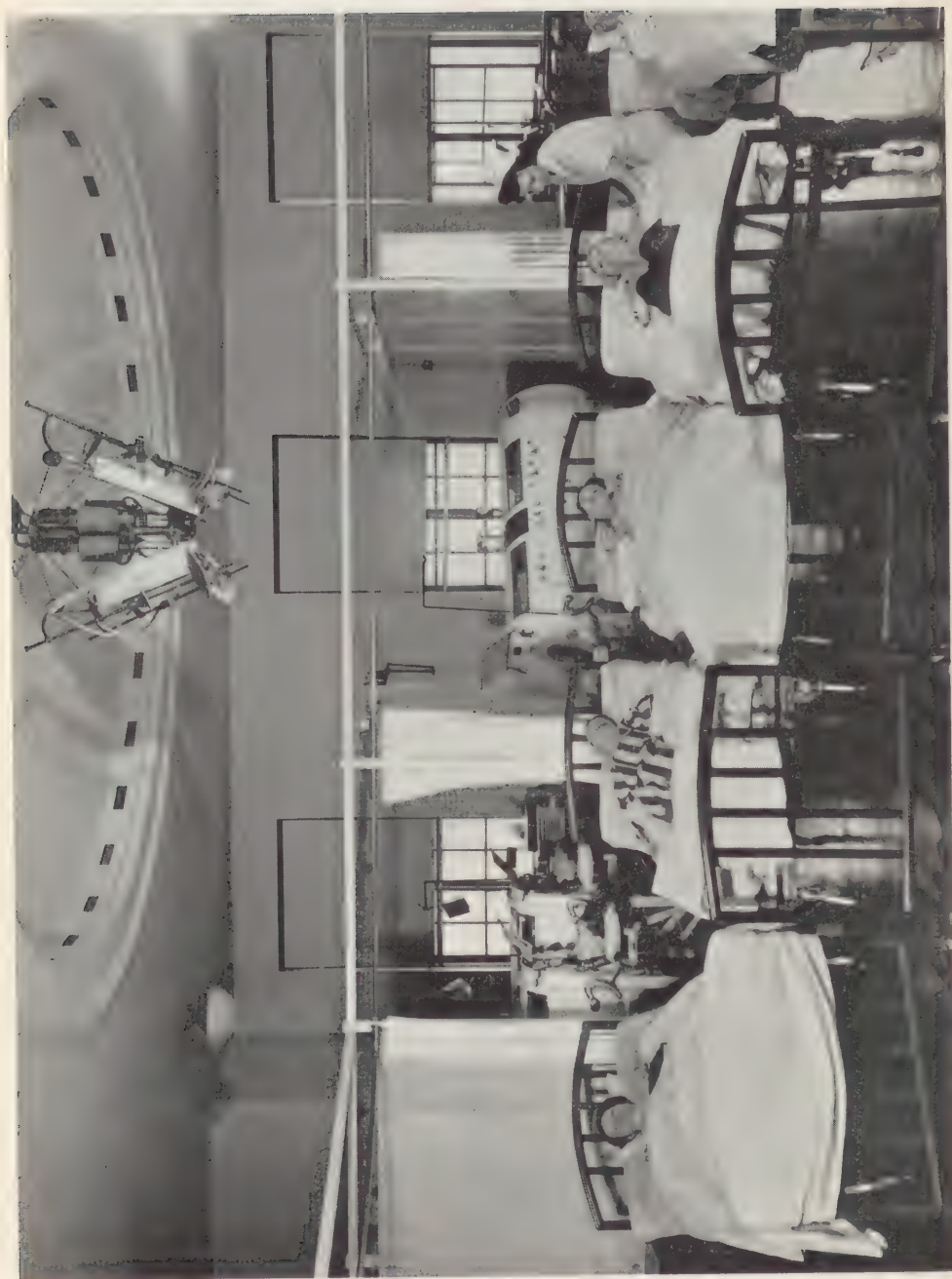
COOPERATION WITH OTHER AGENCIES

The policy of the official agency is not only the promotion of special programs such as those outlined in the preceding pages, but also of cooperation with other State and National agencies for the care, treatment and rehabilitation of the crippled child. In the pursuance of this policy, Services for Crippled Children has concluded agreements with the Maryland Chapter, National Foundation for Infantile Paralysis for handling acute cases of poliomyelitis, and with the Vocational Rehabilitation Service of the Maryland State Department of Education for conducting a special educational program for cerebral palsy victims.

INFANTILE PARALYSIS PROGRAM

The care and treatment of patients with infantile paralysis (poliomyelitis) in Maryland were, for many years, the responsibility of the State Department of Health in cooperation with the Children's Hospital School and the James Lawrence Kernan Hospital. In 1941, when it became apparent that there would be an epidemic of infantile paralysis the official agency formulated a plan which provided for consultation services to the physicians and county health officers for the early diagnosis of infantile paralysis, the immediate hospitalization of such patients during the acute stage, later their transfer to one of the crippled children's hospitals, and follow-up care and treatment. This program provided the best medical and surgical care from the date of diagnosis to the time of the ultimate discharge of the patient. It was financed by a special grant in aid from the United States Children's Bureau and The Maryland Chapter, National Foundation for Infantile Paralysis which provided some financial support. After the 1941 outbreak, the Maryland Chapter, National Foundation for Infantile Paralysis, assumed the full financial support for the care of patients with this disease. The Chapter, in cooperation with the official State agency, provided funds, when needed, for hospitalization, medical and nursing service, physical therapy, orthopedic appliances, transportation to and from hospitals and clinics, and for the training of professional personnel for modern treatment of this dread disease. In 1945, the official agency and the Maryland Chapter, National Foundation for Infantile Paralysis, entered into an agreement which stipulated that these cases were the sole responsibility of the official agency but that financial aid from the Foundation would continue.

Under this agreement the official agency and the local County Health Officers arrange for early hospitalization of the patient and the



Polio Patients Respirator Unit, Children's Hospital School



Polio Patient Before and After Treatment

Maryland Chapter guarantees the cost of care during the first three months in all cases where the official agency indicates need for financial assistance. When further hospital treatment is required, upon the recommendation of the official agency the Maryland Chapter covers the costs for the necessary period. The length of time required for hospital care is estimated by reports received from the hospitals.

Old cases of infantile paralysis are referred by the Maryland Chapter to the local Orthopedic Clinics held by Services for Crippled Children. The findings and recommendations of the clinician are sent to the Maryland Chapter and form the basis for plans for future financial assistance, the cost of which, when approved, is met by the Chapter.

The above agreement has proved of inestimable value to the community by providing a comprehensive plan consisting of medical and hospital care, nursing, physical therapy and medical social service for all sufferers from infantile paralysis and by eliminating unnecessary duplication of effort on the part of both agencies.

CEREBRAL PALSY PROGRAM

The condition known as cerebral palsy is an impaired condition in the motor areas of the brain which manifests itself in lost or abnormal muscular control. It may affect one or all parts of the body, including the speech mechanism, and it usually exists at birth. Until recently, the cerebral palsied child was branded as "afflicted" and considered feeble-minded. Consequently he either received no care at all, or he was committed to an institution for mental defectives. However, while it is true that some areas of his brain are irreparably damaged, modern medical science has demonstrated that, in many instances, he possesses normal intelligence and that he may acquire the control of certain functions through special treatment, physical and occupational therapy, mechanical appliances and special education.

Until the establishment of Services for Crippled Children, little or nothing had been done for the care and education of cerebral palsied children in the State of Maryland. In 1937, the official agency conducted a series of conferences for a better evaluation of the potentialities of the cerebral palsied child, but no special program was outlined. Two years later, in 1939, the initial steps were taken for the inauguration of such a program by the establishment of a semi-annual clinic in Cumberland, serving Allegany and Garrett Counties and the placing of ten children in the Children's Rehabilitation Institute, a private institution near Baltimore where they received physical therapy, the services of

competent orthopedists and pediatricians and occupational and educational instruction. The children admitted were between the ages of five and fifteen years and of normal intelligence.

For some years nothing more was done through the official agency, but in 1941, the Maryland League for Crippled Children opened a treatment centre at the William S. Baer School for Handicapped Child-



Cerebral Palsy Patients Learn to Walk



William S. Baer School for Handicapped Children

ren in Baltimore with a physical therapist and an attendant. The League withdrew from this work in 1947, and at present it conducts a diagnostic clinic and a nursery school for cerebral palsy cases in Baltimore and a quarterly clinic in Frederick County under the auspices of the local health authorities.

In 1947, as the result of an intensive study of the cerebral palsied child and through a special grant in aid from the United States Children's Bureau, Services for Crippled Children initiated and financed an evaluation and training program in cooperation with the Baltimore City Health Department and the Baltimore City Department of Education, providing for special classes for children with cerebral palsy in the William S. Baer School and the Francis M. Wood School in Baltimore City, the latter for colored handicapped children.

Two special classes are operated at present in the William S. Baer School for Handicapped Children with an enrollment of 30 pupils and two more are planned for the near future. There is one such class in the Francis M. Wood School for Colored Crippled Children with an initial enrollment of 12 pupils and another will be opened shortly. The age limit is from 5 to 12 years. Only children classed as educable are admitted to these classes and those over 9 years of age must be able to feed themselves and take care of their own toilet needs. Each child is accepted for a trial period during which certain tests are made to determine his ability to remain in the school.

A part time medical personnel headed by a Medical Director with training and experience in cerebral palsy provides general medical supervision. Each class is staffed by a teacher, a therapist and a matron: speech therapy and occupational therapy are under the supervision of the medical director of this special project. A registered nurse assists at physical examinations and cares for children who may become ill during school hours. Children whose physical, mental and academic level does not require their segregation in special classes are provided with physical therapy and special arrangements for meals.

The primary aims in the education of the cerebral palsy patient are first — to provide him with means of communication through signals, speech, writing or typing, second to teach him self-help which includes dressing and feeding, and finally, ambulation, comprising crawling, the use of a wheel chair, of mechanical aids or the development of a passable walking gait. When these ends have been accomplished, the cerebral palsied child of normal intelligence is capable of receiving educational training comparable to that of children not similarly handicapped, and vocational training which may eventually enable him to become self-supporting.

EDUCATIONAL ACTIVITIES AND VOCATIONAL REHABILITATION

The function of Services for Crippled Children is primarily to provide adequate medical and surgical care and treatment for crippled children in the State of Maryland, but a necessary corollary to this program is the provision of facilities for educational and vocational training for such children in order that they may become useful members of society. Such provision has been made through the cooperation of State and County Boards of Education which supply special instruction in county schools for children with defective hearing or requiring speech correction, and also home instruction for children unable to attend the schools.

In Baltimore City there are two public schools for physically handicapped children, the William S. Baer School and the Francis M. Wood School, both mentioned above in the outline of the official agency's program for cerebral palsied children. Children admitted to these schools are mainly orthopedic cases. Their program includes academic and vocational instruction, muscle rebuilding, lunch and transportation.

The classrooms are furnished with chairs and desks which may be adjusted to secure comfort and correct posture. The pupils are graded like those in other public schools and they are encouraged through vocational training to develop latent talents in arts and crafts and to learn trades adapted to their physical disabilities. They are periodically examined by an orthopedic surgeon and receive physical therapy administered by trained technicians under his direction.

The vocational rehabilitation of all physically handicapped persons in the State between the ages of 14 and 21 is assured by an agreement for cooperation between Services for Crippled Children and the Vocational Rehabilitation Service of the Maryland State Department of Education whereby the former refers to the latter agency all persons on its register who are in need of training or placement following their physical rehabilitation. The Vocational Rehabilitation Service, reciprocally, reports to Services for Crippled Children all cases coming to its attention which require medical or surgical care.

NEEDS AND FUTURE OBJECTIVES

The record of Services for Crippled Children during the past twelve years is one of notable accomplishment. Some of its programs are unique and constitute pioneer enterprises in the field of public health, but there are gaps in the State plan, revealing the need for further expansion of some existing programs and the inauguration of others.

The situation with regard to orthopedic clinics is most satisfactory and this service has recently been enlarged by providing from two to four additional clinics annually in areas where there were backlogs of old cases and new cases that could not be handled properly with existing facilities.

This is not the case with respect to the special activities of the official agency such as the Rheumatic Fever-Cardiac-Clinics and the Prevention of Deafness and Speech Correction Programs which should be extended to cover the entire State.

Facilities for the care and education of cerebral palsy patients are totally inadequate. It is estimated that there are approximately 1500 cerebral palsied children in Maryland, but at the present time only a fraction of this number can be given the care required for their rehabilitation. Under favorable conditions approximately 70% of these children are educable, but the process is a lengthy one requiring care and training over a period of years. This problem cannot well be met by any individual, county or state. It should be given serious consideration by the Children's Bureau with a view to the establishment of a nationwide program partly financed by funds from the Federal Government.

Practically nothing has been done in Maryland for the care and treatment of epileptics, but a special plan for a limited program has been submitted to the Children's Bureau, and professional personnel and facilities are available for a number of such patients provided that the necessary funds are obtained from the Federal Government and the State.

There is also need for a program designed for the conservation of vision. It should provide adequate care for all children with impaired sight. This would include not only testing of vision but provision of proper lenses, necessary operations for congenital defects and other abnormalities of the eyes which call for surgical intervention.

The extension of existing services contemplated by Services for Crippled Children under a comprehensive plan covering present and future needs will require, first of all, an increase in the number of specialists available, particularly pediatricians experienced in the treatment of rheumatic fever and the cardiac conditions accompanying this disease. Measures are now being taken to meet this need by providing facilities for intensive training of post-graduate students in cardiology. Training of professional personnel must receive fuller consideration. At present there are sufficient facilities for in-training of nurses and other personnel, but later extensive courses should be given at special centres, colleges, hospitals or schools to qualify additional personnel for active service with the official agency. Post-graduate courses for orthopedists, pediatricians and other specialists should also be held by physicians conducting clinics or otherwise associated with the official agency, or by instructors from one of the medical schools in the State. By this means a high standard of excellence will be reached and maintained in the administration of Services for Crippled Children.

The second requirement for the execution of this plan is an increase in the appropriations allotted to the Maryland State Health Department for Services for Crippled Children. The present appropriations are totally inadequate for this purpose, and the deficiency must be met by additional State funds supplemented by Federal aid, if the official agency is to reach its goal of providing complete medical, surgical and convalescent care, follow-up service in homes and social service for the crippled children of the State.

State planning must be carried out in conjunction with local planning if we are to realize our state-wide health goals. The progress of any all-over program will depend partly on action by the people of individual communities, on their initiative and their demand for better health conditions. They should define their requirements and determine their objectives. By so doing they may contribute to the realization of the official agency's State-wide program for the crippled child.

PHYSICIANS AND SURGEONS
ASSOCIATED WITH SERVICES FOR CRIPPLED CHILDREN

Orthopedic Surgeons

DR. GEORGE E. BENNETT

DR. H. ALVAN JONES

DR. HAROLD R. BOHLMAN

DR. RAYMOND E. LENIHARD

DR. ALBERTUS COTTON

DR. I. WILLIAM NACHLAS

DR. GEORGE O. EATON

DR. HARRY L. ROGERS

DR. W. RICHARD FERGUSON

DR. HENRY F. ULLRICH

DR. MOSES GELLMAN

DR. ALLEN F. VOSHELL

DR. ROBERT W. JOHNSON, JR.

DR. E. DAVID WEINBERG

DR. MILTON J. WILDER

Consultants

DR. HELEN B. TAUSSIG, *Cardiology*

DR. DONALD F. PROCTOR, *Otolaryngology*

DR. WINTHROP M. PHELPS, *Cerebral Palsy*

DR. EDWARD A. KITLOWSKI, *Plastic Surgery*

MEDICAL AND SURGICAL TREATMENTS OF PATIENTS WITHIN SPECIFIED DIAGNOSTIC GROUPS

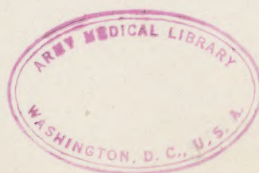
For Calendar Year 1948

Tuberculosis of bones and joints	62
Poliomyelitis	248
Rickets	34
Cerebral palsy	253
Epilepsy	2
Other diseases of the nervous system and sense organs, except eye, ear, and mental disorders	38
Deafness, impairment of hearing, and other conditions of ear and mastoid process	749
Rheumatic fever; other diseases of the heart, except congenital malformations	260
Arthritis and rheumatism	50
Osteomyelitis and periostitis	50
Scoliosis	73
Flat foot, congenital and acquired	667
Other diseases of bones, except congenital malformations	566
Spina bifida and meningocele	21
Congenital malformations of the circulatory system	40
Cleft palate and harelip	91
Congenital dislocation of hip	35
Club foot	219
Other congenital malformations	161
Birth injuries, except cerebral palsy and epilepsy	43
Burns	35
Other morbid conditions due to accidents, poisonings, and violence	93
Other diagnosed diseases	218
Provisional or deferred diagnoses	91
Examination made, no abnormality reported	62
Total	4,161

SERVICES RENDERED

1936 - 1948

YEAR	HOSPITAL ADMISSIONS	DAYS HOSPITAL CARE	ADMISSIONS CONVALESCENT HOMES	DAYS CONVALESCENT CARE	NURSING VISITS	PHYSICAL THERAPY TREATMENTS
1936	118	13,491	0	0	222	3,378
1937	244	35,890	23	1,264	4,304	15,028
1938	261	31,186	1	144	7,612	13,757
1939	243	31,154	6	295	6,862	15,988
1940	252	30,428	0	0	5,764	12,446
1941	378	34,274	6	967	6,043	11,742
1942	338	33,996	14	1,973	4,191	7,504
1943	245	25,729	14	2,570	6,378	6,393
1944	521	36,883	9	2,932	5,770	6,546
1945	451	39,720	8	2,777	4,283	6,874
1946	352	39,802	10	3,606	6,397	7,953
1947	308	31,561	19	4,647	2,706	11,769
1948	591	41,579	33	5,989	5,612	8,989
Totals	4,302	425,693	143	27,164	66,144	128,367



VISITS BY PATIENTS TO ORTHOPEDIC
AND SPECIAL CLINICS

1936 - 1948

Year	Visits to Orthopedic Clinics	Visits to Rheumatic Fever - Cardiac Clinics	Visits to Prevention of Deafness Clinics	Total Clinic Visits
1936	672			672
1937	1,572			1,572
1938	1,394			1,394
1939	2,385			2,385
1940	2,340			2,340
1941	2,651	136		2,787
1942	2,429	186		2,615
1943	2,060	168	1,000	3,228
1944	2,453	281	812	3,546
1945	2,338	465	544	3,347
1946	2,864	230	1,012	4,106
1947	2,947	463	1,683	5,093
1948	3,028	678	1,731	5,437
Totals	29,133	2,607	6,782	38,522

JUNE, 1949